

Remarks

In view of the above amendments and the following remarks, reconsideration of the rejection and further examination are requested.

Claims 10-16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Hemkumar (US 6,356,871) in view of Olin (US 6,708,220).

Claims 10-16 have been amended so as to further distinguish the present invention, as recited therein, from the references relied upon in the rejection. As a result, the above-mentioned rejection is submitted to be inapplicable to the claims for the following reasons.

Claim 10 is patentable over the combination of Hemkumar and Olin, since claim 10 recites, in part, a receiver including a program clock reference correction factor calculator for detecting a transfer rate ratio between a first transfer rate and a second transfer rate based on two contiguous extracted program clock references, and deriving, based on the detected transfer rate ratio, a correction factor for correcting the extracted program clock reference so as to match the second transfer rate; and a program clock reference corrector for correcting the extracted program clock reference to correspond to the actual transfer rate ratio based on the derived correction factor. The combination of Hemkumar and Olin fails to disclose or suggest the above-discussed features of claim 10.

Regarding Hemkumar, it discloses a decoder 100 which receives an initial program clock reference (PCR) from a transport stream. An initial PCR value is used to load a system time clock (STC) counter 601. The STC counter 601 increments an STC clock. The current value in the counter 601 is then subtracted from each PCR value that is received by the decoder 100 by a block 603 to determine a time rate of change of the decoder STC values with respect to the received PCR values. If the time rates of change differ, the decoder STC frequency is adjusted so as to achieve synchronization. (See column 12, lines 17-52 and Figure 6).

Based on the above discussion, the decoder 100 of Hemkumar adjusts the STC frequency when a difference exists between time rates of change of the PCR values and the STC values. Therefore, it is apparent that the feedback system can be construed as corresponding to the claimed system time clock recoverer. However, it is clear that Hemkumar does not disclose or suggest the claimed program clock reference correction factor calculator and program clock reference corrector. Regarding this, Hemkumar discloses that the program clock reference (PCR) is received from the transport stream and feed directly into the STC counter 601 and the

block 603 and is used to adjust the STC frequency. There is absolutely no mention in Hemkumar of adjusting the PCR to correspond to the actual transfer rate ratio.

In the “response to arguments” section of the Office Action, it is indicated that Hemkumar discloses the deriving of the correction factor of the extracted reference program clock reference at column 12, lines 35-38. However, this section indicates that if the time rate of change of the decoder STC values is the same as that of the received PCR values, the decoder STC frequency is equal to the STC clock frequency and synchronization is being maintained. The section provides no discussion of deriving a correction factor for the PCR values. Further, it appears that the only item in Hemkumar that potentially could be relied upon as corresponding to the claimed correction factor would be the error signal mentioned at column 12, lines 46-49. However, the error signal is used to adjust the STC frequency and not the PCR values.

Further, the “response to arguments” section of the Office Action also indicates that the correction of the extracted program clock reference to correspond to the actual transfer rate ratio based on the derived correction factor is disclosed at column 12, lines 35-38 of Hemkumar. However, as discussed above, this section deals strictly with detecting and maintaining synchronization of the STC frequency. Additionally, the above-mentioned error signal is used to correct the STC frequency and not the PCR values. Therefore, Hemkumar necessarily fails to disclose these features of claim 10. As a result, Olin must disclose or suggest these features in order for the combination of Hemkumar and Olin to render claim 10 obvious.

Regarding Olin, it discloses the concept of setting a configurable value as a size of a data set when compression should begin so as to optimize a data transfer rate. (See column 6, lines 18-37) However, it is apparent that Olin fails to disclose or suggest the above-discussed features of claim 10. Therefore, Olin fails to address the deficiencies of Hemkumar. As a result, claim 10 is patentable over the combination of Hemkumar and Olin.

As for claim 14, it is patentable over the combination of Hemkumar and Olin for reasons similar to those set forth above in support of claim 10.

Claim 11 is patentable over the combination of Hemkumar and Olin, since claim 11 recites, in part, a receiver including a rate ratio calculator for deriving, based on an extracted program clock reference and a recovered system time clock, a correction factor for correcting the extracted program clock reference so as to match a second transfer rate; and a program clock

reference corrector for correcting the extracted program clock reference to correspond to the actual transfer rate ratio based on the correction factor.

As discussed above, the decoder 100 of Hemkumar adjusts the STC frequency when a difference between time rates of change between the PCR values and the STC values exist. However, there is no disclosure or suggestion in Hemkumar of correcting the PCR. Further, Olin is relied upon as disclosing the concept of setting a configurable value as a size of a data set when compression should begin so as to optimize a data transfer rate. Therefore, it is apparent that the combination of Hemkumar and Olin fails to disclose or suggest the claimed rate ratio calculator and program clock reference corrector as recited in claim 11.

As for claim 15, it is patentable over the combination of Hemkumar and Olin for reasons similar to those set forth above in support of claim 11.

Claim 12 is patentable over the combination of Hemkumar and Olin, since claim 12 recites, in part, a receiver for receiving a first transport stream transmitted by a transmitter at a second transfer rate and detecting a transfer rate ratio between a first transfer rate and the second transfer rate to generate a second transport stream based on the detected transfer rate ratio, wherein the receiver comprises a program clock reference specifier for causing a program clock reference extractor to extract, as a standard program clock reference corresponding to the actual transfer rate ratio, a program clock reference contained in the first transport stream and contained in packet data transferred at the first transfer rate.

As discussed above, the decoder 100 of Hemkumar adjusts the STC frequency when a difference between time rates of change between the PCR values and the STC values exist. However, Hemkumar fails to disclose or suggest that the decoder 100 receives the transport stream at a second transfer rate, detects a transfer rate ratio between a first transfer rate and the second transfer rate to generate a second transport stream based on the detected transfer rate ratio, and extracts, as a standard program clock reference corresponding to the actual transfer rate ratio, a program clock reference contained in the transport stream and contained in packet data transferred at the first transfer rate. Further, Olin is relied upon as disclosing the concept of setting a configurable value as a size of a data set when compression should begin so as to optimize a data transfer rate. Therefore, it is apparent that the combination of Hemkumar and Olin fails to disclose or suggest the receiver recited in claim 12.

As for claim 16, it is patentable over the combination of Hemkumar and Olin for reasons similar to those set forth above in support of claim 12.

Claim 13 is patentable over the combination of Hemkumar and Olin, since claim 13 recites, in part, a receiver including a program clock reference correction factor generator for extracting a transfer rate ratio from a first transport stream, and deriving, based on the extracted transfer rate ratio, a correction factor for correcting an extracted program clock reference so as to match a second transfer rate; and a program clock reference corrector for correcting the extracted program clock reference to correspond to the actual transfer rate ratio based on the correction factor.

As discussed above, the decoder 100 of Hemkumar adjusts the STC frequency when a difference between time rates of change between the PCR values and the STC values exist. However, there is no disclosure or suggestion in Hemkumar of correcting the PCR. Further, Olin is relied upon as disclosing the concept of setting a configurable value as a size of a data set when compression should begin so as to optimize a data transfer rate. Therefore, it is apparent that the combination of Hemkumar and Olin fails to disclose or suggest the claimed program clock reference correction factor generator and program clock reference corrector recited in claim 13.

Because of the above-mentioned distinctions, it is believed clear that claims 10-16 are patentable over the references relied upon in the rejection. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 10-16. Therefore, it is submitted that claims 10-16.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

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